

VERSION: The version of this Message Mapping Guide is Final Version 1.0.2 dated 9/23/2009.

"This artifact is considered to be a technical document. Please contact PHINTech@cdc.gov, copying the NEDSS team at NEDSS@cdc.gov for assistance with this artifact."

This Message Mapping Guide describes the content and message mapping specifications for the set of data elements used to communicate information to meet the requirements for Influenza Summary Case Notifications to CDC. The intended audiences for this document are the state/local and CDC programs and other public health related organizations interested in using the HL7 V2.5 Case Notification Message Specification for transmitting their data elements to CDC.

References

National Condition Reporting, Notifiable Events and Reporting Mechanisms for 2009, Division of Integrated Surveillance Systems and Services, National Center for Public Health Informatics, Centers for Disease Control and Prevention, May 2009.

National Notification Message Structure Specification version 2.0 is used to inform the mapping methodology for this guide. The ORU^R01 - Unsolicited Observation Message is the HL7 standard message used to pass the Nationally Notifiable Condition Report message. The National Notification message is used to convey a limited data set of investigation/surveillance information to meet national reporting requirements, where CDC is the only receiver. This document specifies the structure and methodology for the use of the Health Level 7 (HL7) Version 2.5 Unsolicited Result Message (ORU^R01) that supports the electronic interchange of any Nationally Notifiable Condition message from public health entities to the CDC.

Column	Description
Program Variables Column Headings	
PHIN Variable ID	PHIN data element identifier drawn from the coding system PH_PHINQuestions_CDC.
Label	Short name for the data element, which is passed in the message.
Description	Description of the data element. It may not match exactly with the description in PHIN Questions, because there may be local variations on the description that do not change the basic concept being mapped to the PHIN Question identifier.
Data Type	Data type for the variable response expected by the program area. Data Types are Coded, Numeric, Date or Date/time, and Text.
CDC Priority	Indicator whether the program specifies the field as: R - Required - Mandatory for sending the message. If data element is not present , the message will error out. P - Preferred - This is an optional variable and there is no requirement to send this information to CDC. However, if this variable is already being collected by the state/territory or if the state/territory is planning to collect this information because it is deemed important for your own programmatic needs, CDC would like this information sent. CDC preferred variables are the most important of the optional variables to be earmarked for CDC analysis/assessment, even if sent from a small group of states. O - Optional - This is an optional variable and there is no requirement to send this information to CDC. This variable is considered nice-to-know if the state/territory already collects this information or is planning to collect this information, but has a lower level of importance to CDC than the preferred classification of optional data elements.
May Repeat	Indicator whether the response to the data element may repeat. "Y" in the field indicates that it may repeat. If the response does not repeat, the field is not populated or contains "N". Data elements that repeat require special processing.
Value Set Name	Name of the pre-coordinated value set in PHIN-VADS from which the response is drawn. The value sets and coding systems are accessible via the Public Health Information Network Vocabulary Access and Distribution Services. To obtain the valid code sets for the Influenza Summary implementation message mapping guide, complete the following steps: 1. Go to http://phinvads.cdc.gov . 2. Click on the Views hyperlink 3. Enter Influenza Summary in the lookup box and press the Search Views button. 4. Click on Details next to Summary Case Notification to obtain the valid code sets.
Value Set Code	Code for the pre-coordinated value set in PHIN-VADS from which the response is drawn. The value sets and coding systems are accessible via the Public Health Information Network Vocabulary Access and Distribution Services. To obtain the valid code set for the Influenza Summary implementation message mapping guide, complete the following steps: 1. Go to http://phinvads.cdc.gov . 2. Click on the Views hyperlink 3. Enter Influenza Summary in the lookup box and press the Search Views button. 4. Click on Details next to Summary Case Notification to obtain the valid code set.
Message Mapping Methodology Column Headings	
Message Context	Specific HL7 segment and field mapping for the element.
HL7 Data Type	HL7 data type used by PHIN to express the variable. Datatypes expected are CWE, SN, TS, ST, TX, XPN, XTN, or XAD, depending on the type of data being passed.
HL7 Optionality	Indicates if the field is required, optional, or conditional in a segment. The only values that appear in the Message Mapping are: R – Required. Must always be populated O – Optional. May optionally be populated.
Implementation Notes	Related implementation comments.

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PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Priority	May Repeat	Value Set Name	Value Set Code	HL7 Message Context	HL7 Data Type	HL7 Optionality	HL7 Implementation Notes
NOT108	Notification ID	The unique identifier for the notification record.	Text	R				MSH-10-Message Control ID.	ST	R	If notification ID is not unique, a timestamp may be appended. No UID or label is passed in the message.
NOT114	Receiving Application	CDC's PHIN Common Data Store (CDS) is the Receiving Application for this message.	OID	R				MSH-5-Receiving Application.	HD	R	Literal Value: 'PHINCDS^2.16.840.1.114222.4.3.2.10^ISO'
NOT115	Message Profile ID	First instance is the reference to the structural specification used to validate the message. Second instance is the reference to the PHIN Message Mapping Guide from which the content is derived.	Text	R	Y/2			MSH-21-Message Profile ID.	EI	R	First instance literal value: 'NND_ORU_v2.0^PHINProfileID^2.16.840.1.114222.4.10.3^ISO' Second instance literal value: 'NIA_SUM_Case_Map_v1.0^PHINMsgMapID^2.16.840.1.114222.4.10.4^ISO'.
DEM197	Local Subject ID	The local ID of the Subject/Entity.	Text	R				PID-3-Patient Identifier List	CX	R	PID-3.1-ID Number - Local Subject Identifier used to uniquely identify the Summary Case Notification at the local level. PID-3.4-Assigning Authority format <localID&OID&ISO>. Does not pass Variable ID or label.
DEM100	Subject Name Type	Name is not requested by the program, but the Patient Name field is required to be populated for the HL7 message to be valid. Have adopted the HL7 convention for processing a field where the name has been removed for de-identification purposes.	Coded	R	Y/2	Name Type (HL7)	PHVS_NameType_HL7_2x	PID-5.7-Patient Name Type	XPN	R	Literal value: ~^S Patient Name Type is passed in the second instance as HL7 reserves the first instance of the name field for Legal Name.
INV168	Local Record ID	Sending system-assigned local ID of the case investigation with which the Subject is associated.	Text	R				OBR-3-Filler Order Number	EI	R	OBR-3.1 is the internally assigned case/investigation ID. OBR-3.3 is the OID for sending application as assigning authority. OBR-3.4 is the literal value: 'ISO'. The same value is used for each OBR segment, and the UID and label are not passed in the message.

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PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Priority	May Repeat	Value Set Name	Value Set Code	HL7 Message Context	HL7 Data Type	HL7 Optionality	HL7 Implementation Notes
NOT099	Subject Type	Type of subject for the notification. "Person", "Place/location", or "Non-Person Living Subject" are the appropriate subject types for Notifications to CDC.	Coded	R		Notification Section Header	PHVS_NotificationSectionHeader_CDC	First OBR Segment-OBR-4-Universal Service ID.	CE	R	Literal value: 'PERSUBJ^Person Subject^CDCPHINVS'
NOT101	Notification Type	Type of notification. Notification types are "Individual Case", "Environmental", "Summary", and "Laboratory Report".	Coded	R		Notification Section Header	PHVS_NotificationSectionHeader_CDC	Second OBR Segment-OBR-4-Universal Service ID.	CE	R	Literal Value: 'SUMM^Summary Case Notification^CDCPHINVS' No UID or label is passed in the message.
NOT103	Date First Submitted	Date/time the notification was first sent to CDC. This value does not change after the original notification.	Date/time	R				OBR-7-Observation Date/time.	TS	R	The same value is used for each OBR segment, and the UID and label are not passed in the message.
NOT106	Date of Report	Date/time this version of the notification was sent. It will be the same value as NOT103 for the original notification. For updates, this is the update/send date/time.	Date/time	R				OBR-22-Result Report/Status Chg Date/time.	TS	R	The same value is used for each OBR segment, and the UID and label are not passed in the message.
INV169	Condition Code	Condition or event that constitutes the reason the notification is being sent.	Coded	R		Nationally Notifiable Disease Surveillance System (NNDSS) and Other Conditions of Public Health Importance	PHVS_NotifiableEvent_Disease_Condition_CDC_NNDSS	OBR-31-Reason for Study.	CE	R	Default value in each OBR instance: '11063^Influenza Outbreak^NND' The UID and label are not passed in the message.
NOT116	National Reporting Jurisdiction	National jurisdiction reporting the notification to CDC. (State or local FIPS Code)	Coded	R		National Reporting Jurisdiction	PHVS_NationalReportingJurisdiction_NND	Observation/OBX Segment with this variable ID and label	CWE	O	
NOT113	Reporting County	County reporting the notification.	Coded	O		County	PHVS_County_FIPS_6-4	Observation/OBX Segment with this variable ID and label	CWE	O	Five digit numeric FIPS code To send a statewide Summary Case Notification report, the Reporting County OBX-5 value would appear as [STWIDE^Statewide^CDS]
INV165	MMWR Week	MMWR Week for which case information is to be counted for MMWR publication.	Numeric	R				Observation/OBX Segment with this variable ID and label	SN	O	
INV166	MMWR Year	MMWR Year (YYYY) for which case information is to be counted for MMWR publication.	Date	R				Observation/OBX Segment with this variable ID and label	TS	O	
INV190	Person Reporting to CDC - Name	Name of the Person who is reporting the case to the CDC	Text	P				Observation/OBX Segment with this variable ID and label	XPN	O	Expected format: ' <Last Name>^<First Name> '
INV191	Person Reporting to CDC - Phone Number	Phone Number of the Person who is reporting the case to the CDC	Text	P				Observation/OBX Segment with this variable ID and label	XTN	O	Expected format: <i>Work Telephone Number :</i> ' ^WPN^PH^^^^734^6777777 '

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PHIN Variable ID	Label/Short Name	Description	Data Type	CDC Priority	May Repeat	Value Set Name	Value Set Code	HL7 Message Context	HL7 Data Type	HL7 Optionality	HL7 Implementation Notes
INV192	Person Reporting to CDC - Fax Number	Fax Number of the Person who is reporting the case to the CDC	Text	P				Observation/OBX Segment with this variable ID and label	XTN	O	Expected format: <i>Work Fax Number :</i> ' ^WPN^FX^^^734^6777778 '
INV193	Person Reporting to CDC - Email	Email Address of the person reporting the case to the CDC	Text	P				Observation/OBX Segment with this variable ID and label	XTN	O	Expected format: <i>Work Email Address:</i> ' ^WPN^Internet^someone@somewhere.com '
SUM113	Count Date	Date on which the summarized data is represented	Date	R				Observation/OBX Segment with this variable ID and label	TS	O	If reporting a weekly Count Group Interval (SUM115), the Count Date is expected to be the last day of the MMWR week.
SUM115	Count Group Interval	Defines the interval of grouped subjects being reported inside of a repeating group.	Coded	R		Time Frame (Daily Weekly)	PHVS_TimeFrameDailyWeekly_CDC	Observation/OBX Segment with this variable ID and label	CWE	O	It is expected that a reporting source will report either Daily or Weekly, but not both.
SUM117	Surveillance Method	Indicates method used for Novel Influenza Surveillance	Coded	R		Surveillance Method (Flu)	PHVS_SurveillanceMethod_Flu	Observation/OBX Segment with this variable ID and label	CWE	O	It is expected that a reporting source will report either "Lab Confirmed" or "Syndromic", but not both.
SUM131	Number of Hospitals Reporting	Number of hospitals reporting data for the current reporting period	Numeric	P				Observation/OBX Segment with this variable ID and label	SN	O	
Repeating Group											
SUM107	Total Count	Summary Report Count being reported.	Numeric	R				Observation/OBX Segment with this variable ID and label	SN	O	component of repeating block - first group OBX-4='1', second group OBX-4='2', etc.
SUM112	Age Group in years	Defines the age of subjects being reported inside of a repeating group.	Coded	R		Age Group (Flu)	PHVS_AgeGroup_Flu	Observation/OBX Segment with this variable ID and label	CWE	O	component of repeating block - first group OBX-4='1', second group OBX-4='2', etc.
SUM114	Count Group Type	Defines the type of grouped subjects being reported inside of a repeating group.	Coded	R		Count Group Type (Flu)	PHVS_CountGroupType_Flu	Observation/OBX Segment with this variable ID and label	CWE	O	component of repeating block - first group OBX-4='1', second group OBX-4='2', etc.
End of Repeating Group											

Generic Case Notification Message Mapping Guide

Date	Version	Description
9/23/2009	Version 1.0.2	Added SUM131 (Number of Hospitals Reporting) per program request.
9/23/2009	Version 1.0.2	Updated Value Set Names for the following PHIN UIDs: SUM112, SUM114, and SUM117.